

Case Study – 7

(30 points)

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Submission: Save this Word document with your answers as a PDF file and upload the PDF file to Canvas.

(15 pts) The EVCSS Project needs at least a mobile application for tenants and a desktop application for apartment staff; as well as support systems to interface to the chargers and the electric power grid. We may not have the staff to complete this project. Before you start development, select one subsystem and perform a build vs. buy vs. outsource analysis similar to Fig 7-4.

Build mobile app	Buy mobile app
Likelier to succeed in implementing more distinct feature requests	Less upfront cost
Ensure has consistent design philosophy with other software components	Can use freed up labour for more complex systems
No recurring licensing fees	Faster deployment
More flexibility in obtaining specific telemetry	Can assume respective developer will help solve issues
Coerces client into needing our future support	Use acquired feature set as potential inspiration

(15 pts) For the EVCSS Project, build a growth estimating spreadsheet similar to Fig 7.8

- Since this is a new system, there will be no “current level”
- Define at least 5 potential performance factors
- Then estimate 1 year, 2 year & 5 year estimates for those factors

Provide a **reason** for each of your performance factors. Remember that the client hopes to grow this product from a local market to a national and possibly global market.

	1 year	2 year	5 year
Apartment complex clients	100	300	1000
Charging Tenants	2000	3000	15000
Chargers	500	2500	15000
Mechanics	50	100	250
Suppliers	5	12	30

Apartment complex clients: Need to know how many separate systems there will be to install and support all aspects

Charging tenants: Need to know total demand for chargers at each apartment

Chargers: How much physical chargers will need built and maintained

Mechanics: How many people will needed on call to service and inspect chargers

Suppliers: Total amount of companies needed to supply charging parts to make sure we scale up construction, repairs, and upgrades.